

# Ardusa

## A GRAMMAR OF THE ARDUSAN LANGUAGES

*by Ian A. Cook*

*last edited*

November 24, 2018

## ***Ardusa: A Grammar of the Ardusan Languages***

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Typeset in Junicode and Fira Sans with Xe<sub>La</sub>TeX.

Ardusa is a fictional landmass set in a fictional constructed world. All of the languages spoken on Ardusa, such as Tavonic, Alnuric, Redodhic, and others, are themselves fictional, spoken by fictional groups of people, and as such are not related to any naturally existing languages. These languages' vocabularies are entirely *a priori*, which means that no words are derived from the vocabularies of real-world languages. That being said, these languages are intended to be naturalistic, so similarities will occur. Nonetheless, any actual duplication is accidental.



No website yet



<https://github.com/nai888/ardusa>



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# Abbreviations

1S	first person singular	INT	interrogative
2p	second person plural	IPFV	imperfective
3pc	third person paucal	NEG	negative
3s	third person singular	NMZ	nominalizer
ABS	absolutive	NPST	nonpast
ACC	accusative	PC	paucal
ACT	active	PFV	perfective
AN	animate	PL	plural
DAT	dative	PRF	perfective
DIM	diminutive	PRG	progressive
ERG	ergative	PST	past
GEN	genitive	PTCP	participle
IMP	imperative	RTSP	retrospective
IN	inanimate	SG	singular
IND	indicative	TOP	topic
INF	infinitive		

- \* ungrammatical
- ? grammatically questionable
- ! semantically odd or ill-formed

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# Acknowledgments

Given that I have not taken any official linguistics coursework, this work would not be possible without several sources of linguistic education. Mark Rosenfelder's *The Language Construction Kit* and *Advanced Language Construction Kit* were important to my first starting out in the world of language construction, with further knowledge gained from David J. Peterson's *The Art of Language Invention*. Of course, I received an unmeasurable amount of education via several online sources, especially the articles available on Wikipedia. Yet more education, as well as inspiration and motivation, have come from the *Conlangery* podcast and all its hosts and guests. Lexicon generation received guidance from Mark Rosenfelder's *The Conlanger's Lexipedia* and William S. Annis' *A Conlanger's Thesaurus*.

Finally, this document's format, layout, and organization have been influenced by several sources, particularly Thomas E. Payne's *Describing Morphosyntax*, Carsten Becker's *A Grammar of Ayeri*, and Matt Pearson's *The Okuna Reference Grammar*.

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# Preface

This document provides a detailed grammatical description of the languages of Ardusa, a fictional landmass set in a fictional constructed world. This project serves as a method for linguistic research, as an intellectual exercise, as an outlet for creative and artistic expression, and as a setting for potential future works of fiction. It is intended primarily for my own personal use and entertainment, though others with similar linguistic interests will hopefully find it interesting and entertaining as well. I have chosen to use  $\text{\LaTeX}$  to typeset this grammar because it provides a way to be clear, consistent, and organized. Further, since  $\text{\LaTeX}$  uses plain text files, it allows me to use Git for version control so I can keep track of changes over time.

My goal is to build a series of languages with naturalistic grammars that are linguistically plausible and consistent, yet also original in their content and details. This project consists of three distinct and unrelated language families, each of which contains one or more related languages. Some elements of these languages are influenced by existing languages such as Japanese, Finnish, Navajo, Nahuatl, and Arabic, but they are not meant to simply mimic these, instead drawing this inspiration into new forms along with entirely *a priori* lexicons. Ardusa and the Ardusan languages is an ongoing project with no fixed endpoint or goal.

This concise grammar is my attempt to document the Ardusan languages in an official and systematic way, and as comprehensively as possible. It is intended to be the official description of the languages. This is a concise grammar because, admittedly, I am not a professional linguist, nor have I taken any linguistics coursework. My education in linguistics consists solely of self-guided research, which means invariably my knowledge will be limited. It is a concise grammar because, frankly, I don't know enough to go into greater detail. That being said, I'm always eager to learn, and will always accept feedback. Again, learning is one of the reasons for this endeavor.

Since the purpose of writing this grammar is to provide a comprehensive description of the Ardusan languages, not to teach them to others, it is not intended to serve as a textbook or as a way to learn the languages. I have organized topics thematically, rather than curricularly, and I employ technical terms when they are precise, accurate, and appropriate. I have not conducted a formal analysis of the languages, but I have worked to make it as descriptive as possible.

The discussion is ordered from the smallest elements of the languages to the largest. It begins with a description of each language's place in Ardusa followed by their phonologies, it addresses morphology and the combining of words, it discusses vocabulary and derivation, and it explains syntax and discourse. The final chapter serves as a reference grammar, summarizing all of the previous chapters. There are

also several appendices describing the conceptual metaphors that organize much of the lexicons, the naming practices of the fictional speakers of these languages, several translation examples, and lexicons. Other resources include a glossary of linguistic glossing abbreviations, a bibliography, and an index.

This document uses several linguistics conventions to clarify meaning. Any reference to specific orthographic spelling is marked with angled brackets, such as ⟨hin⟩. Pronunciations are usually given phonemically, in which case they are marked with slashes, such as /hin/. Phonetic pronunciations are used only when conveying specific details like the difference between allophones, and are marked with square brackets, such as [çin]. Both phonemic and phonetic pronunciations are given using the International Phonetic Alphabet. Foreign words are always written in italics, such as *lu*. English glosses are surrounded by single quotes, such as ‘and’. If a morphological gloss is provided in-line, it is surrounded by parentheses, such as (INF).

Many short examples are provided in one single line.

- (1) Tavonic: *šek* /ʃek/ ‘ran’ (run-IND.PST.PRF)

Longer examples are usually provided with a multi-line, or interlinear, gloss. In these examples, the optional first line will indicate which language the example is in, if it is not clear from context. The next line presents the text in that language, followed by the pronunciation. After this, the text is broken into its component morphemes, and the following line provides a morpheme-by-morpheme gloss. The final line provides an English translation of the example phrase or sentence.

- (2) Tavonic

*Oko nan šeđo.*

/o'ko nan 'ʃe.ðo/

*oko -nan še-đo*

dog -PL.AN.TOP run-IND.PST.PRG

‘The dogs were running.’

As shown in example 2, morpheme glosses are labeled with abbreviations in SMALL CAPS. A full list of all glossing abbreviations is given on page vii. A hyphen marks a morpheme boundary within a word that is shared between the text and its gloss, while a period marks a boundary present in only one or the other, including when a single word in the text corresponds to multiple words in its gloss. Clitics are marked with an equals sign, reduplication with a tilde, discontinuous affixes (e.g., infixes, circumfixes) with angle brackets, and morphemes that cannot be easily separated out with backslashes.

The L<sup>A</sup>T<sub>E</sub>X source code for this grammar and a copy of this PDF are available in a public [GitHub](#) repository. Undoubtedly, there will be errors in this document. If you notice any, please feel free to open an issue in the GitHub repository with a description and the location of the error.

*Ian A. Cook*  
*Minneapolis, September 8, 2018*

## Part I

# Tavonic Language Family

# History and Ethnography

This chapter will present a brief history of the Tavonic language family, followed by a short description of its ethnolinguistic context.

## 1.1 Brief History

The Tavotath (the Tavonic people) migrated to Ardusa hundreds of years ago in what they termed Year 1 of the Ardusan Era (AE). Ardusa is far from any other landmasses and is isolated from the influence of other lands and other peoples. The Tavotath landed in the warm southeastern regions of Ardusa where they first established their new home, naming this new realm *Urdeso*, a compound word meaning ‘Safe Land’. Over the following centuries, the Tavotath spread westward and northward throughout the whole of Ardusa.

As the Tavotath spread, they formed several individual territories, each of which eventually developed into small kingdoms. These kingdoms constantly battled one another for power, and borders were continually shifting. Those who fled the fighting fled northward, furthering the Tavonic expansion throughout Ardusa. As the Tavotath spread farther apart and splintered, their language diverged. Two main dialects emerged, one in the north and one in the south.

After a few hundred years, one kingdom in the south emerged as dominant, conquering or allying with more and more kingdoms until, by 327 AE, the entire south of Ardusa was united under one empire. This empire enforced the usage of the language that had emerged in the south, thus forming the Alnuric language. The empire continued to push northward until it spread too thin and reached a stalemate with the allied kingdoms in the north around 371 AE. Finally, in 582 AE after a couple hundred years of relatively stable rule, the empire declined and divided again into individual territories, leaving behind six sovereign kingdoms.

While the empire was emerging in the south, the kingdoms in the north formed a loose alliance to resist its spread. The alliance managed to reach a stalemate with the empire, stopping its spread northward. The allied kingdoms together maintained the language that emerged in the north, thus forming the Redodhic language. Eventually, as the empire split in 582 AE and the northern alliance was no longer needed, the north also split into individual territories, leaving behind four sovereign kingdoms.

## 1.2 Ethnography

### 1.2.1 Donyms and Language Names

#### Tavonic

The Tavotath were a tribe that migrated to Ardusa together, fleeing their previous home. The Tavonic word *tavo* /ta'vo/ means 'person', and so the derived word *Tavotaþ* /ta.vo'taθ/ means 'people' or 'tribe'. In other words, the Tavotath referred to themselves as the People, with *Tavonak* being the Language of the People. The Alnuric- and Redodhic-derived words, *Tevodeþ* /te.vo'deθ/ and *Tovujip* /to.vu'dʒiθ/ respectively, refer to all people who descended from the original Tavotath tribe. Both Alnuric and Redodhic are Tavotath languages and part of the Tavonic language family.

#### Alnuric

For hundreds of years, the empire ruled in the southern region of Ardusa. The Tavonic word *unner* /un'ner/ 'empire' evolved into the Alnuric word *alnur* /al'nur/. *Alnurek* /al.nu'rek/ 'Alnuric' takes its name from this word. Meanwhile, the Redodhic name for the empire is *nonar* /no'nar/, and its name for the Alnuric language is *Nonrik* /non'rik/. Similarly, the Alnuric and Redodhic names for the Alnuric people are *Alnureþ* /al.nu'reθ/ and *Nonrip* /non'riθ/ respectively.

#### Redodhic

In the north, the alliance resisted the empire's expansion. The Tavonic word *aroltutaþ* /a.rol.tu'taθ/ signifies 'alliance', however the alliance instead used the simpler form *arutaþ* /a.ru'taθ/ 'standers' to signify the alliance of those kingdoms standing against the empire. *Arutaþ* evolved into the Redodhic word *rejip* /re'dʒiθ/, and *Redoðik* /re.do'ðik/ 'Redodhic' takes its name from this word. The Alnuric name for the alliance is *eradeþ* /e.ra'deθ/, and its name for the Redodhic language is *Eratþek* /e.rat'θek/. Similarly, the Redodhic and Alnuric names for the Redodhic people are *Redoðip* /re.do'ðiθ/ and *Eratþep* /e.rat'θeθ/ respectively.

### 1.2.2 Ethnology

Here will be a brief ethnological description of the Tavotath.

### 1.2.3 Demography

Here will be a brief demographical description of the Tavotath.

## Phonology

This chapter will present the inventory of consonants and vowels. An observational analysis of the Tavonic languages' syllable structures and phonotactics will follow. The chapter will close with notes on syllable stress within words and a brief exploration of intonation.

### 2.1 Tavonic Phoneme Inventory

#### 2.1.1 Consonants

With approximately 20 consonants, Tavonic has an “average” inventory.<sup>1</sup> Table 2.1 shows the full chart of consonant phonemes, along with several allophones enclosed in parentheses. Table 2.2 shows how each consonant in Tavonic is romanized.

Despite its “average” inventory of consonants, there are many more allophones that occur in the language. First, any doubled consonant is realized as a geminated (elongated) consonant.

- (1) *unner* /un:er/ ‘empire’

Thus, example 1 above is realized with a lengthened [n]. A doubled ⟨r⟩ is similarly geminated, but the pronunciation changes from a flap/tap to a trill.

The remaining allophones occur due to various sound change processes, mostly by assimilation. For example, /n/ becomes velarized when it appears immediately before a velar consonant.

- (2) *tavonga* [ta.voŋ'ga] ‘humanlike’

As discussed above, ⟨r⟩ can be pronounced as both a tap/flap [ɾ] and as a trill [r]. Additionally, when part of certain consonant clusters, it can be pronounced as an approximant [ɹ]. This primarily occurs when the ⟨r⟩ leads into a cluster or immediately follows a nasal.

- (3) *frorgali* [froɹ.'ga.li] ‘to un-see’

<sup>1</sup>Ian Maddieson, “Consonant Inventories,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/1>.



Table 2.1: Tavonic Phonetic Consonant Inventory (allophones in parentheses)

Consonants	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Velar
Nasal	m			n		(ŋ)
Plosive		p b	t d			k g
Fricative		f v	θ ð	s z	ʃ ʒ	x ɣ
Flap/Tap				r		
Trill				(r)		
Approximant				(ɹ)		
Lateral				l		

Table 2.2: Tavonic Consonant Romanization

Phone	Phoneme	Romanization	English	Notes
[m]	/m/	⟨m⟩	⟨m⟩	
[n]	/n/	⟨n⟩	⟨n⟩	
[ŋ]	/n/	⟨n⟩	⟨n⟩	/n/ becomes velarized before a velar consonant
[p]	/p/	⟨p⟩	⟨p⟩	
[b]	/b/	⟨b⟩	⟨b⟩	
[t]	/t/	⟨t⟩	⟨t⟩	
[d]	/d/	⟨d⟩	⟨d⟩	
[k]	/k/	⟨k⟩	⟨k⟩	
[g]	/g/	⟨g⟩	⟨g⟩	
[f]	/f/	⟨f⟩	⟨f⟩	
[v]	/v/	⟨v⟩	⟨v⟩	
[θ]	/θ/	⟨þ⟩	⟨th⟩	
[ð]	/ð/	⟨ð⟩	⟨dh⟩	
[s]	/s/	⟨s⟩	⟨s⟩	
[z]	/z/	⟨z⟩	⟨z⟩	
[ʃ]	/ʃ/	⟨š⟩	⟨sh⟩	
[ʒ]	/ʒ/	⟨ž⟩	⟨zh⟩	
[x]	/x/	⟨ķ⟩	⟨kh⟩	
[ɣ]	/ɣ/	⟨ğ⟩	⟨gh⟩	
[r]	/r/	⟨r⟩	⟨r⟩	
[r]	/r/	⟨rr⟩	⟨rr⟩	⟨r⟩ is trilled when doubled
[ɹ]	/r/	⟨r⟩	⟨r⟩	⟨r⟩ is occasionally pronounced as an approximant when a part of a consonant cluster
[l]	/l/	⟨l⟩	⟨l⟩	

Table 2.3: Tavonic Vowel Inventory



## 2.1.2 Vowels

Tavonic distinguishes five vowel qualities, as shown in Table 2.3, giving it an “average” inventory.<sup>2</sup> This means the consonant–vowel ratio is 20:5 or 4.0, which is “average”.<sup>3</sup> Tavonic does not distinguish long and short vowels and does not allow any diphthongs.

Note that all Tavonic vowels have a very rigid acceptable pronunciation with very little variance.

- (4) a. *akrinsali* ‘to rewrite’ is pronounced /ak.rin'sa.li/. ⟨i⟩ is not pronounced with a lax [ɪ] in closed syllables (i.e., /ak.rɪn'sa.li/)
- b. *tlopevem* ‘permission’ is pronounced /tlo.θe'vem/. ⟨e⟩ is not pronounced with a central [ɐ] in unaccented syllables or an open [ɛ] in closed syllables (i.e., /tlo.θə'vem/), nor is it diphthongized to [eɪ] (i.e., /tlo.θe'veɪm/)
- c. *kalo* ‘man’ is pronounced /xa'lo/. ⟨a⟩ is not pronounced with a raised [æ] (i.e., /xæ'lo/), a backed [ɑ] (i.e., /xɑ'lo/), or a centralized [ɜ] (i.e., /xɜ'lo/)
- d. *esondi* ‘arable’ is pronounced /e.son'di/. ⟨o⟩ is not pronounced with an open [ɔ] (i.e., [e.sɔn'di]), nor is it diphthongized to [ou] (i.e., /e.sou'n'di/)
- e. *frumbali* ‘to misunderstand’ is pronounced /frum'ba.li/. ⟨u⟩ is not pronounced with an open [ʌ] (i.e., /frʌm'ba.li/) or a centralized [ʊ] (i.e., /frum'ba.li/)

## 2.2 Tavonic Phonotactics

At the time of writing, there does not yet exist a sufficient corpus for a meaningful statistical analysis of Tavonic’s phonotactics. Therefore, this section will present only a cursory observational analysis.

### 2.2.1 Syllable Structures

Syllables in Tavonic must contain a vowel to serve as the syllable’s nucleus. Each syllable will only have at most one vowel. Syllables may also include any single consonant or one of a limited set of

<sup>2</sup>Ian Maddieson, “Vowel Quality Inventories,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/2>.

<sup>3</sup>Ian Maddieson, “Consonant–Vowel Ratio,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/3>.

two-consonant clusters as the onset, coda, or both.

In other words, the most complex syllable structure allowed in Tavonic is CCVCC, with restrictions on the allowable consonant clusters, giving Tavonic a “moderately complex syllable structure”.<sup>4</sup>

## V

The most basic syllable structure is simply a vowel (V). V syllables occur exclusively at the beginning of a word.

- (5) a. *e* /e/ ‘in’ or ‘on’  
b. *eđer* /e’ðer/ ‘pen’  
c. *abom* /a’bom/ ‘two’  
d. *oko* /o’ko/ ‘dog’  
e. *usukon* /u.su’kon/ ‘possessor’

## CV

A syllable can contain a single-consonant onset. There is no restriction on which consonants may appear in the onset. This is likely the most frequent type of syllable in Tavonic.

- (6) a. *ga* /ga/ ‘but’  
b. *lu* /lu/ ‘and’  
c. *mo* /mo/ ‘with’  
d. *ǰalo* /xa’lo/ ‘man’  
e. *šėđo* /’ʃe.ðo/ (run.PST.IND.PRG) ‘was running’

## VC

A syllable can contain a single-consonant coda. There is no restriction on which consonants may appear in the coda. VC syllables also occur exclusively at the beginning of a word.

- (7) a. *elbi* /el’bi/ ‘egg’  
b. *ablu* /ab’lu/ ‘cat’  
c. *ongo* /on’go/ ‘pan’  
d. *urda* /ur’da/ ‘safe’

---

<sup>4</sup>Ian Maddieson, “Syllable Structure,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/12>.

## CVC

The above two syllable types can be combined by having a consonant at both the onset and coda of a syllable. This syllable type can occur anywhere, but is most common at the end of a word. This is likely the second-most frequent type of syllable in Tavonic.

- (8) a. *kalven* /xal'ven/ '400'  
b. *ablunga* /ab.lun'ga/ 'catlike'  
c. *akradir* /ak.ra'dir/ 'writing implement'  
d. *esonak* /e.so'nak/ 'citizen'

## CCV

CCV

## VCC

VCC

## CCVC

CCVC

## CVCC

CVCC

## CCVCC

CCVCC

## 2.2.2 Phonological Changes

Placeholder

## 2.2.3 Syllable Parsing

Placeholder

## 2.2.4 Number of Syllables per Word

Placeholder

## 2.3 Tavonic Prosody

Placeholder

### 2.3.1 Syllable Weight

Placeholder

### 2.3.2 Word Stress

Placeholder

### 2.3.3 Intonation

Placeholder

## 2.4 Alnuric Phoneme Inventory

Placeholder

### 2.4.1 Consonants

Placeholder

### 2.4.2 Vowels

Placeholder

## 2.5 Alnuric Phonotactics

Placeholder

### 2.5.1 Syllable Structures

Placeholder

### 2.5.2 Phonological Changes

Placeholder

### 2.5.3 Syllable Parsing

Placeholder

### 2.5.4 Number of Syllables per Word

Placeholder

## 2.6 Alnuric Prosody

Placeholder

### 2.6.1 Syllable Weight

Placeholder

### 2.6.2 Word Stress

Placeholder

### 2.6.3 Intonation

Placeholder

## 2.7 Redodhic Phoneme Inventory

Placeholder

### 2.7.1 Consonants

Placeholder

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# Morphological Typology

Now that Tavonic, Alnuric, and Redodhic's phonologies have been defined in chapter 2, this chapter will discuss the next larger unit of language: morphemes. A morpheme is the smallest meaningful unit in a language. A morpheme can be a root, or it can be another element that affects or modifies the meaning of a root. Further, a morpheme may be freestanding, or it may be bound to other morphemes to form a larger word.

The discussion will begin with a general explanation of the Tavonic family's morphological typology. Following this will be a brief summary of the various morphological processes that occur in the languages, ending with an explanation of the locus of marking.

## 3.1 Morphological Typology

Traditional research would show that Tavonic is typologically partially isolating and partially fusional, meaning that morphemes are often either separated into distinct words or fused together such that a single phonological unit represents several morphemes. However, according to Bickel and Nichols,

Recent research has shown that such a scale [ranging from isolating to agglutinative to fusional to introflexive] conflates many different typological variables and incorrectly assumes that these parameters covary universally.<sup>1</sup> Three prominent variables involved in this are phonological fusion, formative exponence, and flexivity (i.e. allomorphy, inflectional classes).<sup>2</sup>

Therefore, we will examine each of these areas—phonological fusion, formative exponence, and flexivity, as well as the degree of synthesis—separately.

<sup>1</sup>Frans Plank, "Split Morphology: how Agglutination and Flexion Mix," *Linguistic Typology* 3 (1999): 279–340; Balthasar Bickel and Johanna Nichols, "Inflectional Morphology," in *Language Typology and Syntactic Description*, ed. Timothy Shopen, 2nd edition (Cambridge: Cambridge University Press, 2005).

<sup>2</sup>Balthasar Bickel and Johanna Nichols, "Fusion of Selected Inflectional Formatives," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/20>.

### 3.1.1 Phonological Fusion

Tavonic's phonological formatives are partially fusional, being partially “isolating” and partially “concatenative”.<sup>3</sup> The concatenative morphemes are phonologically bound, requiring a “host word” with which they form one single phonological word, while the isolating morphemes are “full-fledged phonological words of their own”.

Verbs are almost exclusively concatenative, with tense, aspect, and mood morphemes attached directly to the verb's stem.

- (1) a. *ufuli*  
/u'fu.li/  
  
*uf-uli*  
sing-INF  
  
'to sing'
- b. *Ufunte!*  
/u'fun.te/  
  
*uf-unte*  
sing-IMP  
  
'Sing!'
- c. *Mon ufuk.*  
/'mon u'fuk/  
  
*mon uf-uk*  
IS.TOP sing-IND.PST.PRF  
  
'I sang.'

Example 1 shows how morphemes are attached to the stem of a verb through suffixes, rather than with separate (isolating) modifying words or nonlinear ablaut or tone modifications.

Example 1c similarly shows how personal pronouns are fusional. Example 2 demonstrates further how each personal pronoun simultaneously indicates the person, number, animacy in the third person, case, and whether it is the topic.

- (2) a. *mor* /mor/ 'I' (IS.ABS)  
b. *peton* /θe'ton/ 'you' (2p.ACC)  
c. *ginsek* /gin'sek/ 'to it' (3pc.IN.TOP.DAT)

This concatenation appears not only in inflectional morphology, but also in derivational morphology. For example, the word *ablutik* /a.blu'tik/ 'kitten' is formed from the root noun *ablu* /a'blu/ 'cat' with a diminutive suffix attached (*ablu*-DIM). Similarly, the word *akradir* /ak.ra'dir/ 'pen' is formed from the root verb *akrali* /ak'ra.li/ 'to write' with a nominalizing suffix (*akra*-NMZ).

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<sup>3</sup>Bickel and Nichols, “Fusion of Selected Inflectional Formatives.”

Nouns, on the other hand, are exclusively isolating. All grammatical markings, including number, gender, case, and topicality, are indicated using phonologically separate postpositions.

- (3) a. *Akrakon no aruþ.*  
/ak.ra'kon no a'ruθ/

*akrakon* -no                      ar-uþ  
writer -AN.SG.TOP.ABS stand-IND.NPST.PRG

‘The writer is standing.’

- b. *Esokon elbi moþes šus botra ken draš.*  
/e.so'kon el'bi mo,θes 'ʃus bot'ra ken 'draʃ/

*esokon* -Ø              *elbi* -moþes              *šus*              *botra* -ken              *dr-aš*  
farmer -AN.SG.ABS egg -IN.PC.TOP.ACC 3s.AN.GEN wife -AN.PL.DAT give-IND.NPST.RTSP

‘The farmer has given the eggs to his wife.’

Notice in example 3 how every noun is followed by a postposition that identifies that noun’s grammatical role within the sentence.

### 3.1.2 Formative Exponence

Tavonic has mostly polyexponential formatives, meaning that, in almost all cases, single morphemes express multiple grammatical categories each.<sup>4</sup> Derivational morphemes are all monoexponential while inflectional morphemes are almost exclusively polyexponential.

- (4) *Tavotik nan one vi?*  
/ta.vo'tik nan o'ne vi/

*tavo-tik*      -nan              on-e                      =vi  
person-DIM -AN.PL.TOP play-IND.NPST.IPFV =INT

‘Do children play?’

Example 4 includes one derivational morpheme and three inflectional morphemes attached to the roots *tavo* and *oneli*, two of which are polyexponential. The first morpheme, *-tik*, a diminutive that derives the word ‘child’ from the root ‘person’, is a monoexponential derivational suffix. The postposition *nan* is a polyexponential morpheme that identifies the preceding noun’s gender (animate), number (plural), and topicality. The single-letter suffix *-e* attaches to the verb to express the mood (indicative), tense (nonpast), and aspect (imperfective). Finally, the word *vi* is a monoexponential interrogative clitic that turns the sentence into a question.

Noun postpositions can additionally encode case. In example 4, the noun *tavotik* is inferred to be in the absolutive case despite being unmarked for it. In many other situations, this grammatical case

<sup>4</sup>Balthasar Bickel and Johanna Nichols, “Exponence of Selected Inflectional Formatives,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/21>.

is similarly encoded within the same polyexponential postposition. In example 3b, the word *mopes* indicates that the noun ‘egg’ is inanimate, paucal, the topic, and in the accusative case.

One noun postposition, *nut* has not fully cumulated, with the noun’s number being still separated into a distinct segment.

- (5) a. *nut-Ø* /nut/ (AN.TOP.ACC-SG)  
 b. *nut-os* /nu'tos/ (AN.TOP.ACC-PC)  
 c. *nut-on* /nu'ton/ (AN.TOP.ACC-PL)

All other noun postpositions are fully cumulated and cannot be separated into their component morphemes.

- (6) a. Inanimate Ergative  
 i. *ða* /ða/ (IN.SG.ERG)  
 ii. *ðes* /ðes/ (IN.PC.ERG)  
 iii. *dun* /dun/ (IN.PL.ERG)  
 b. Inanimate Topic Dative  
 i. *moĥ* /moĥ/ (IN.SG.TOP.DAT)  
 ii. *mekos* /me'kos/ (IN.PC.TOP.DAT)  
 iii. *nikun* /ni 'kun/ (IN.PL.TOP.DAT)

### 3.1.3 Flexivity

Tavonic nouns, adjectives, and verbs display flexivity, which means that these words are divided into separate classes that receive distinct inflectional allomorphs. On such allomorphs, otherwise identical morphemes take distinct phonological shapes.

Nouns are divided into animate and inanimate genders. These two genders determine which postpositions are used to provide the grammatical context of the noun.

- (7) a. *bilt ri*  
 /'bilt ri/  
*bilt* -*ri*  
 breath -AN.PC.ABS  
 ‘breaths’  
 b. *eðer -le*  
 /e'ðer le/  
*eðer le*  
 pen -IN.PC.ABS  
 ‘pens’

In example 7, both *bilt* and *eđer* are marked for the paucal number and the absolutive case, but because *bilt* is animate and *eđer* is inanimate, the shape of the postpositions are entirely different.

Although they are distinct, the shapes are often more closely related than in example 7. Example 8 shows the animate and inanimate forms of the plural ergative postposition; the relation between the two forms is much clearer, as only the vowel changes.

- (8) a. *bilt din*  
       /'bilt din/  
       *bilt*     *-din*  
       breath -AN.PL.ERG  
       'breaths'
- b. *eđer dun*  
       /e'đer dun/  
       *eđer*   *-dun*  
       pen -IN.PL.ERG  
       'pens'

Nouns do not show possessive flexivity, as there is no possessive classification.<sup>5</sup> There is only one method of forming a possessive relationship: using the genitive case.

Adjectives also show flexivity since they decline to match the gender of the noun they modify. Each adjective has a distinct animate and inanimate form, with animate adjectives ending in *-a*, *-i*, or *-u* and inanimate adjectives ending in *-e* or *-o*.

- (9) a. *frandi bilt su*  
       /fran'di 'bilt su/  
       *frandi*     *bilt*     *-su*  
       visible.AN breath -AN.SG.GEN  
       'of the visible breath'
- b. *frando eđer šo*  
       /fran'do e'đer šo/  
       *frando*     *eđer*   *-šo*  
       visible.IN pen -IN.SG.GEN  
       'of the visible pen'

In example 9, the form of *frandi* changes depending on whether it is modifying an animate noun like *bilt* or an inanimate noun like *eđer*.

<sup>5</sup>Johanna Nichols and Balthasar Bickel, "Possessive Classification," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/59>.

Verbs are divided into three distinct conjugation classes, each identified by the infinitive form. Class I verb infinitives end in *-ali*, class II verb infinitives end in *-eli*, and class III verb infinitives end in *-uli*.

- (10) a. Class I: *bruḡat-ali* /bru.θa'ta.li/ 'to handle' (handle-INF)  
 b. Class II: *š-eli* /'ʃe.li/ 'to run' (run-INF)  
 c. Class III: *teg-uli* /te'gu.li/ 'to worry' (worry-INF)

Beyond just the form of the infinitive, the verb's class determines the entire conjugation paradigm for that verb.

- (11) a. Class I: *bruḡat-abe* /bru.θa'ta.be/ 'handling' (handle-ACT.PTCP)  
 b. Class II: *š-iba* /'ʃi.ba/ 'running' (run-ACT.PTCP)  
 c. Class III: *teg-ube* /te'gu.be/ 'worrying' (worry-ACT.PTCP)

As shown in example 11, the same inflection takes a different form when attached to a verb of a different class. To form the active participle, *bruḡatali* becomes *bruḡatabe* and *teguli* becomes *tegube*. Following this pattern, one might expect *šeli* to become \**šebe*, but instead it becomes *šiba*.

### 3.1.4 Synthesis

As discussed in subsection 3.1.1, derivation and verb inflection occurs by attaching affixes to a stem or root, forming singular phonological words. Meanwhile, noun declension occurs using postpositions that mark the grammatical information for the noun. These postpositions are separate phonological words from the nouns themselves.

In all cases, however, inflected forms constitute singular *syntactic* words because the inflections cannot be separated or reordered at all. This means that Tavonic morphology is synthetic.<sup>6</sup>

Tavonic verbs normally inflect to show mood, tense, and aspect, a total of three morpheme categories per word. The maximally inflected form adds negation, a particle that is a separate phonological word but remains a part of the syntactic word of the verb, bringing Tavonic's category-per-word ratio up to 4.<sup>7</sup>

- (12) *Šun onek bo.*  
 /'ʃun o'nek bo/  
 šun          on-ek          -bo  
 3S.AN.TOP play-IND.PST.PFV -NEG  
 'S/he did not play.'

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<sup>6</sup>Balthasar Bickel and Johanna Nichols, "Inflectional Synthesis of the Verb," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/22>.

<sup>7</sup>Ibid.

## 3.2 Morphological Processes

### 3.3 Locus of Marking

# Morphology

How does the morphology work?



# Compounding

How does compounding work?

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# Time and Measurement

How to tell time and measure things.

# Derivation

How do you make new words?

# Syntax

How do words go together?

## Discourse

How does conversation work?

## Tavonic Reference Grammar

Here is a reference grammar for Tavonic.

## Alnuric Reference Grammar

Here is a reference grammar for Alnuric.

## Redodhic Reference Grammar

Here is a reference grammar for Redodhic.



## Part II

# Kalaakan Language Family

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## History and Ethnography

## Phonology

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## Morphological Typology

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## Morphology

## Compounding

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## Time and Measurement

## Derivation



## Syntax

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## Kalaakan Reference Grammar

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## Elvish Reference Grammar

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## Orcish Reference Grammar

## **Part III**

# **Kunmian Language Family**

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## History and Ethnography



## Phonology

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## Morphological Typology

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## Morphology

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## Compounding

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## Time and Measurement

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## Derivation

## Syntax

## Discourse



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## Kunmian Reference Grammar

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## Gnomish Reference Grammar

## Part IV

# Appendices

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## Conceptual Metaphors

What metaphors do the vocabulary convey?

Language is a tool. I speak *with* or *using* Tandi, rather than just speaking Tandi.

B

Kinship

C

Names

D

## Examples

## Vocabulary



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# Bibliography

- Annis, William S. “A Conlanger’s Thesaurus.” *Fiat Lingua*. <http://fiatlingua.org/2014/09/>.
- Becker, Carsten. “A Grammar of Ayerí: Documenting a Fictional Language.” <https://github.com/carbeck/ayerigrammar>.
- Bickel, Balthasar, and Johanna Nichols. “Exponence of Selected Inflectional Formatives.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/21>.
- . “Fusion of Selected Inflectional Formatives.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/20>.
- . “Inflectional Morphology.” In *Language Typology and Syntactic Description*, edited by Timothy Shopen. 2nd edition. Cambridge: Cambridge University Press, 2005.
- . “Inflectional Synthesis of the Verb.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/22>.
- Maddieson, Ian. “Consonant Inventories.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/1>.
- . “Consonant-Vowel Ratio.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/3>.
- . “Syllable Structure.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/12>.
- . “Vowel Quality Inventories.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/2>.

- Nichols, Johanna, and Balthasar Bickel. "Possessive Classification." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/59>.
- Payne, Thomas E. *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge, United Kingdom: Cambridge University Press, 2006. ISBN: 0-521-58805-7. <http://www.cambridge.org/vi/academic/subjects/languages-linguistics/grammar-and-syntax/describing-morphosyntax-guide-field-linguists>.
- Pearson, Matt. "The Okuna Reference Grammar." <http://pearson.conlang.org/>.
- Peterson, David J. *The Art of Language Invention: From Horse-Lords to Dark Elves, the Words Behind World-Building*. New York, New York, United States of America: Penguin Books, 2015. ISBN: 978-0-14-312646-1. <http://www.artoflanguageinvention.com/books/>.
- Plank, Frans. "Split Morphology: how Agglutination and Flexion Mix." *Linguistic Typology* 3 (1999): 279–340.
- Rosenfelder, Mark. *Advanced Language Construction*. Chicago, Illinois, United States of America: Yonagu Books, 2012. ISBN: 978-1478267539. <https://www.zompist.com/lck2.html>.
- . *The Conlanger's Lexipedia*. Chicago, Illinois, United States of America: Yonagu Books, 2013. ISBN: 1493733001. <https://www.zompist.com/lexipedia.html>.
- . *The Language Construction Kit*. Chicago, Illinois, United States of America: Yonagu Books, 2010. ISBN: 978-0-9844700-0-6. <https://www.zompist.com/lckbook.html>.

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